TOP SECRET

25X′



PHOTOGRAPHIC INTERPRETATION REPORT

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

KANSU PROVINCE CHINA



25**X**1

TOP SECRET

25X1

MARCH 1974 COPY NO. 87 41PAGES PIR-013/74



Sanitized Copy	Approved for Release 2011/08/09 : CIA-RDP78T05162A000	300010083-7 ——25 X 1
, ,	IOP SECKET RUFF	23%1
		25 Y 1

TABLE OF CONTENTS

		Page
ABS	TRACT	1
INT	RODUCTION	1
TAF	RGET CATEGORIES	3
A.	MISSILES	3
B.	AIR	11
C.	GROUND FORCES	15
D.	NUCLEAR	23
E.	ELECTRONICS	25
F.	INDUSTRIAL	31
G.	STORAGE	35
H.	UNIDENTIFIED FACILITIES	39
I.	TRANSPORTATION	41
	INT. TAR A. B. C. D. E. F. G.	B. AIR C. GROUND FORCES D. NUCLEAR E. ELECTRONICS F. INDUSTRIAL G. STORAGE H. UNIDENTIFIED FACILITIES

1 1

I. ABSTRACT

1. This report contains imagery-derived information on Kansu Province, China. All installations and facilities in this report are currently maintained in the installations data file of the national base of imagery derived information (NBIDI). The information is presented in textual, tabular, and graphics form. Discussed in the report are nine major installation categories: missiles, nuclear facilities, airfields, ground order-of-battle, electronics, storage facilities, industry, unidentified installations, and transportation. This report includes the latest and best imagery available through November 1973

25X1

II. INTRODUCTION

- 2. Kansu Province is in north-central China in the Upper Yellow River region. It encompasses a total of 300,000 square miles, an area larger than Texas. Kansu shares a 350-nautical-mile (nm) political boundary with Mongolia. In addition, common provincial boundaries are shared with Tsinghai, Szechwan, and Shensi, as well as with Ningsia Hui and Sinkiang Autonomous Regions.
- 3. The most outstanding feature of this geography is the natural flat valley floor called the Kansu Corridor. This valley, lying 1,500 feet above sea level, extends for 1,000 nm through the center of the province in a northwest/southeast direction. Natural boundaries of varied type flank both sides of the corridor. The Tsinling and Chi-lien Mountains, reaching heights up to 15,000 feet, line the southern flank, while areas of desert, dunes, and loess plateau line the north. These features control the installation and population density pattern within the province. Although the majority of the population lives near the capital, Lan-chou, other quite heavily inhabited areas, i.e., oasis cities, dot the landscape of the corridor.
- 4. Major lines of communications and transportation follow this same general pattern. The only rail line from central China to the west extends from Lan-chou to Wu-lu-mu-chi in Sinkiang Autonomous Region. This rail line is fed by two major lines leading into the province from the east. One enters from Ningsia Hui Autonomous Region and the other from Shensi Province.
- 5. There are four surface-to-surface missile facilities in Kansu, the most important of which is Shuang-cheng-tzu Missile Test Center, the largest SSM test center in China.
- 6. Ten surface-to-air missile facilities are in the province, of which one is R&D-associated and two are training areas. These constitute two of the three SAM training areas in China.
- 7. Kansu is part of the Lan-chou air defense district. Of the 18 airfields in the province, seven are fighter bases, five are general military support airfields, and six are civil. There currently is no bomber unit deployed in Kansu.
- 8. At least six and possibly as many as nine division-sized ground forces units have been observed in Kansu. They consist of infantry, artillery, armored, cavalry, and AAA units. In addition, there is a probable specially tailored border defense unit of undetermined size in the province.

25X1

- 10. There are 63 electronics facilities in the province, consisting of EW/AW radar facilities, communications facilities, radio relay facilities, and a large space tracking facility at Lan-chou.
- 11. Heavy industry is concentrated mainly along the corridor. There are 90 significant industry-related facilities in the province. One of these, Pai-yin Explosives Plant 805, is considered strategic. We believe that high explosives which may be used in nuclear weapons may be produced at this plant. Additionally, eight are considered major.

- 1 -



Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A00030001	10083-7 25 X 1 25 X 1
TOT SECRET KOTT	25X1
12. Twenty-seven POL, four explosives, and 18 general storage facilities are loca Of these, seven are extensive enough to be considered regional.	ted in Kansu.
only three facilities in Kansu remain unidentified. All are cave-type activity. One is at Shuang-cheng-tzu; the other two are near Lan-chou. There facilities in Kansu.	
III. TARGET CATEGORIES	
A. Missiles	
Surface-to-Surface Missiles	
14. There are currently four SSM-associated facilities within Kansu Province: Shu Missile Test Center (SCTMTC), Wu-wei SSM Training School, Shuang-ta SSM Field and Min-lo Probable SSM Fixed Field Position (Figure III-A-5 and Table III-A-1).	
15. <u>SCTMTC.</u> The test center at Shuang-cheng-tzu was first observed on photograph 1961. It is in the Gobi Desert, approximately 400 nm northwest of Lan-chou, and SSM R&D center in China.	
16. The facilities at Shuang-cheng-tzu support R&D, functional model test launch training exercises. Facilities at the range include four launch complexes, SSM instruments facilities, two rangehead communications facilities, a main support base, and a myriad comport facilities (Figure III-A-1).	ation/tracking
17. Operational testing probably began in 1961 and has included photographic of the research and development of the CSS-1 through CSS-X-4 missile systems (Figure	
18. <u>Wu-Wei</u> . The Wu-wei SSM Training School, one of two SSM training schools at Wu-wei, 200 nm southeast of the Shuang-cheng-tzu Missile Test Center. It was on photography in 1960.	
19. Missile-related facilities at Wu-wei were added to a previously existing barracks 1961 and 1965. These facilities now include the training school, a practice launch parequipment maintenance and storage areas.	
20. SRBM-, CSS-1-, and CSS-2-associated equipment has been observed at the scholamounts and intervals since 1966.	ool in varying
21. Shuang-ta. Shuang-ta SSM Field Training Site was first observed in 1970 only known field training site in China, it is 20 nm south-southeast of Wu-wei SSM Training Street St	The 25X1 aining School.
22. Facilities at Shuang-ta, which were constructed in 1966, probably are associ Wu-wei SSM Training School. They include several drive-in revetments emplaced into flanking a ravine and one concrete pad.	
23. MRBM-associated equipment was observed there only exercise was in progress. This was the only missile activity ever observed at Shuang	when a CSS-1 25X1 g-ta.
24. Min-lo. The field position at Min-lo was present on photography as early 1970. It is in an isolated ravine 41 nm east of the Liu-ching-kou SSM Launch which is in Tsinghai Province.	
25. The only permanent feature of the site is a probable launch pad.	
26. Other identifying features include a graded earth apron surrounding the pactoral, and several parking areas.	l, a loop exit
- 3 -	

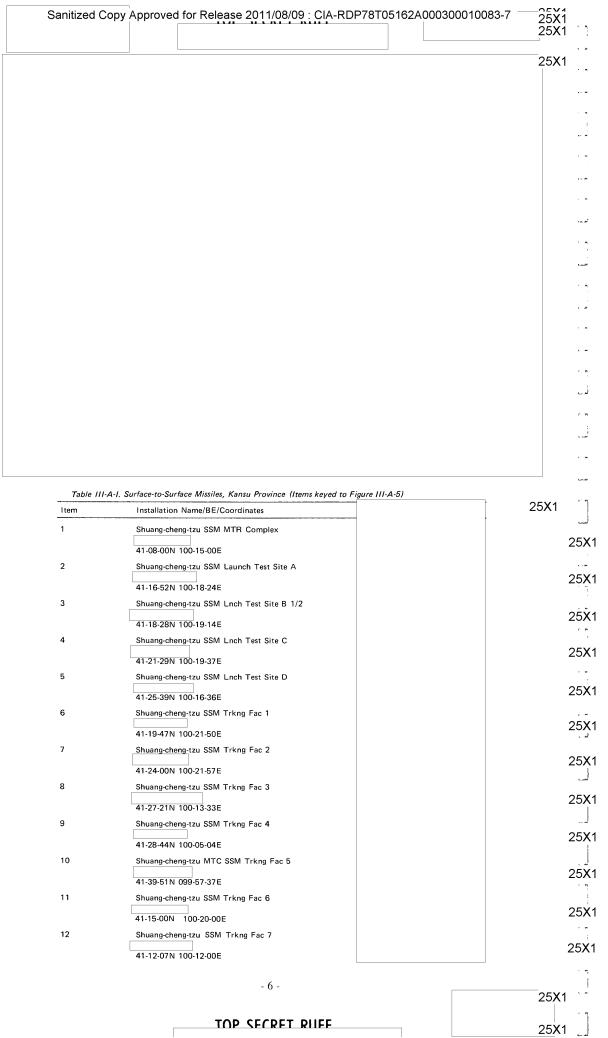
27. No missile-related equipment has been observed at the facility (Figure III-A-3).

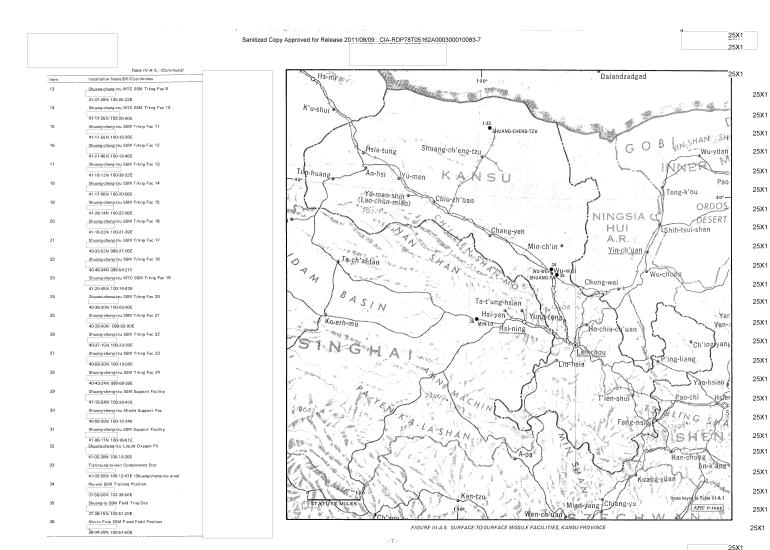
Defensive Missiles

- 28. There are 19 surface-to-air missile (SAM)-related facilities in Kansu Province. Seven of these facilities contain SAM equipment; however, only four of the seven are deployed in the standard SAM role. Three facilities are R&D and/or training related.
- 29. The balance of the defensive missiles facilities within the province consists of unoccupied standard sites, unoccupied training sites, and support-related facilities (Figure III-A-6 and Table III-A-2).
- 30. Occupied Sites. Three of the four occupied sites deployed in the standard role defend a metropolitan area, Lan-chou. Lan-chou SAM sites C29-1, E04-1, and F35-1 are deployed west, north, and northwest of the city, respectively. C29-1 has been occupied since August 1970; E04-1 was first observed in December 1969; and F35-1 was deployed in July 1972.
- 31. The remaining occupied site, Yu-men A12A-1, is deployed south of the plutonium production plant at Yu-men. It has been occupied since August 1968.
- 32. Unoccupied Sites. There are four SAM sites presently unoccupied in the province. Two of the sites are at Shuang-cheng-tzu, the third is at Yu-men, and the fourth at Lan-chou. SCTMTC

has never been observed occupied, while B07-1 has been unoccupied since August 1970. The site at Yu-men, A12-1, apparently has been abandoned since May 1969. Lan-chou SAM Site B12A-1 has been unoccupied since July/August 1970. 33. R&D Facilities. The SAM launch complex at SCTMTC is 15 nm northwest of the main support base. It consists of three launch sites, housing/support facilities, and seven tracking facilities. These sites support Chinese SAM research and development test programs. 34. Training Sites. Shan-tan A is one of three CSA-1 training facilities in China. It is in Shan-tan, approximately 220 nm northwest of Lan-chou. The facility consists of five CSA-1 sites apparently used in training and operational roles. As many as four of the five sites have been occupied at one time. Sites at Shan-tan A have been active since they were first observed in December 1965. 35. Shan-tan B is probably the live-firing training area associated with Shan-tan A SAM Training Area. It is approximately 14 nm north-northwest of Shan-tan. The facility contains three launch sites and housing/support facilities. Activity at Shan-tan B has been observed at intervals since initial observation in November 1966 (Figure III-A-4). 25X1 25X1 TOP SECRET RUFF 25X1







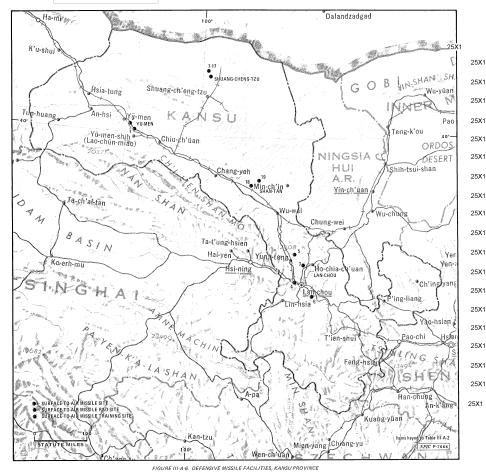
TOP SECRET RIIFE

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7 25X1

IUP SELKE I KUIFF 25X1

Installation Name/BE/Coordi Yu-men SAM Site A12 A01 40-13-08N 097-11-59E Yu-men SAM Site A12-01 40.14.13N 097.11.44F Lan-chou SAM Site F35-01 Lan-chou SAM Site C29-01 36-13-02N 103-12-32E 36-38-48N 104-13-14E 35-57-21N 104-01-41E Shuang-cheng-tzu SAM Site A12-01 41-07-00N 100-21-09E 41-16-42N 100-38-40E Shuana-cheng-tzu SAM La 41-05-03N 100-31-14E Shuang-cheng-tzu MTC SAM Trkng Fac 1 41-04-36N 100-30-00E Shuang-cheng-tzu SAM Instr Si 41-06-00N 100-35-00E Shuang-cheng-tzu SAM Instr Site 3 41-09-00N 100-46-00E Shuang-cheng-tzu SAM Instr Site 41-01-00N 100-35-00E Shuang-chang-tzu SAM Ins 41-01-00N 100-46-00E Shuang-cheng-tzu SAM Instr Site 41-11-20N 101-00-30E 40-57-00N 100-58-00E Shuang-cheng-tzu SSM/Sup 41-06-17N 100-16-51E Shan-tan SAM Trng Area A 38-45-49N 101-05-42E 38-56-57N 101-08-07E



-

25X1

25X1

TOP SECRET RIIFE

AIR

B. Air

Airfields

36. Kansu Province is part of the Lan-chou Air Defense District. There are 18 airfields in this province, seven fighter, five general military support, and six civil (Figure III-B-2 and Table III-B-1).

Bomber Activity

37. Although no deployed bomber units have been identified in Kansu Province, BADGER, BEAGLE, and BULL aircraft have been observed at Shuang-cheng-tzu Airfield. These aircraft were observed primarily within an area of the airfield which is similar in design to Soviet airborne weapon test areas. Equipment similar in configuration to Soviet ASM equipment has been observed in this area, as well as unidentified equipment apparently of Chinese design. An unidentified missile similar in appearance to the Chinese CSA-1, but varying dimensionally, was observed there in November 1970 (Figure III-B-1). In addition, an L-shaped instrumentation and airdrop marker/bombing range is east of the airfield. These factors suggest that the airfield may be associated with ASM activity.

Fighter Airfields

- 38. Four of the seven fighter airfields, Wu-Wei, Chang-yeh, Lin-tao, and Ching-shui, currently have two fighter regiments each. While only FAGOT/FRESCO are at Wu-wei and Chang-yeh, Lin-tao and Ching-shui have a mixture of FARMER and FAGOT/FRESCO.
- 39. The remaining three fighter airfields, Shuang-cheng-tzu, Man-shui, and Ta-la-chih, have contained up to one regiment of fighter aircraft in the past. While Shuang-cheng-tzu and Man-shui have exhibited a mixture of FAGOT/FRESCO and FARMER, only FAGOT/FRESCO have been observed at Ta-la-chih.
- 40. Although no AAM equipment has been observed at any airfields in Kansu, facilities similar to AAM facilities in the Soviet Union are present at Shuang-cheng-tzu Airfield, Ching-shui Airfield, and Lin-tao Airfield.

Other Military-Associated Airfields

41. Five airfields: Shuang-cheng-tzu Airfield North, O-chi-na-chi Airfield, Yu-men Airfield, Chiu-chuan Airfield, and Hsia-kuan-ying Airfield appear to support general military activity in their respective areas. Because of the restrictions of length and type of runways, only Chiu-chuan and Hsia-kuan-ying could support fighter activity.

Other Airfields

42. The remaining six airfields support either civil air activity or farming activity within the province.

Hardened Airfield Facilities

43. Hardened aircraft storage shelters are present at Shuang-cheng-tzu Airfield, Chang-yeh Southeast, Wu-wei, and Lin-tao Airfield.

Airfield-Related Facility

44. Shuang-cheng-tzu Instrumentation Bombing Range is 10 nm southeast of Shuang-cheng-tzu Airfield. The facility consists of three instrumentation sites, complete with optical tracking stations and radar, forming a triangle with a circular airdrop marker. This facility probably supports live-fire activity associated with the Shuang-cheng-tzu Airfield.

- 11 -



Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7
TOP SECRET RIFE

25X1 25X1

25X1 25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1 25X1

25X1

25X1 25X1

25X1 25X1 25X1

25X1

25X1 25X1

25X1

25X1

Table III-B-1, Airfields and Air-Related Facility, Kansu Province (Item. Air Order-of-Battle Latest Photograph Afld prob supporting mil acty in area, No OB ever observed. 6,940x270, E/W graded earth 40-57-45N 100-14-46E Fighter base also supports research & development at nearby SCT Mal Test Center

As meny as two rests of Highter scft have been observed on previous coverage.

1 BADGER, 5 BEAGLE, 24 FARMER, 2 FISHBED, 15 FAGOTY, ERESCO. 1.HOUIND, 2 CRATE, 1 COLT, 1 BEAGLE, 7 FARMER, 1 CRATE, 3 COLT, 1 HOUND, Shuang-cheng-tzu Alfd 13,500×270, NE/SW concrete 40-23-59N 099-47-34E 41-57-45N 101-02-48E 2,600x175, NE/SE 2,000x140, E/W graded earth Yu-men Airfield An-hsi Airfield 4,050×210, E/W graded earth Civil afld supporting town of An-hsi. No OB ever observed. 40-31-00N 095-47-00E 7,272x182 6,968x185, NW/SE NW/SE, concrete 7,250x326, 592x330, 5,500x200, NW/SE, asphalt; NE/SE, graded earth; NNE/SSW, graded earth 4,400x200, NE/SW, graded earth 38 FAGOT/FRESCO 1 COLT, Fighter afld, 42 FAGOT/FRESCO, 38-48-07N 100-40-20E Chiu-chuan Airfield No OB. 39-51-25N 098-20-29E Chiu-chuan Airfield S Fighter afid, 18 FARMER, 11 FAGOT/ China-shui Airfield 17 FARMER, 5 FAGOT/FRESCO 39-33-13N 098-53-08E 38-55-45N 099-32-45E ·Lan-chou Airfield 7,500x300, ENE/WSW 6 COLT, 36-02-21N 103-52-49E 8,200×190, 7,250×190 NW/SE, NW/SE, 39 FAGOT/FRESCO 2 COLT, 37-59-21N 102-34-06E Fighter afld. As many as 8 BULL aircraft have been observed at this afld. 18 FARMER, 3 FAGOT/FRESCO, 1 COLT, 2 COKE, 1 CRATE 11,100×175, N/S 18 FARMER, 1 CRATE, 3 FAGOT/ FRESCO, 1 COOT, 2 COKE, Man-shui Airfield Ta-la-shih Airfield Fighter afld, 20 FAGOT/FRESCO, 1 FRESCO FARMER 36-37-38N 104-59-52E Civil afld supporting Tien-shui, No OB ever observed. 3,200×150, E/W 34-33-35N 105-51-40E 10,000×185, NNE/ Lin-tao Airfield 20 FARMER, 31 FAGOT/FRESCO Fighter afld poss trng school, 20 FARMER, 31 FAGOT/FRESCO 35-18-26N 103-50-06E 34-26-02N 104-00-59E Hsia-kuan-ying Afld Prob mil supt and supply afld, 1 CRATE, 16 COLT, NNW/SSE

40-42-20N 100-31-20E *Represents highest OB observed.

Ha-mir Dalandzadgad K'u-shui ²25X1 B Wu-yuan Shuang-ch'eng-tzu Hsia-tung W NNER KA SHUANG CHENG TZU Pao Feng-k'ou 40°-Chiu-ch'uan ORDOS X NINGSIA DESERT HUI Shih-tsui-shan A.R. Min-ch'in 🌢 Ta-ch'ai-tan Yin-ch'uan ONA Chung-wei BASIN Ta-t'ung-hsien Yer Ko:erh-mu Yen-Ch'ing yan P'ing-liang ien-shui LAN-CHOL LING A.LA SHAN SHE Chiang-yu

- 13 -

25X1

C. Ground Forces

- 45. Photography has revealed enough facilities and equipment in Kansu Province to accommodate at least six and possibly as many as nine division-sized units (Figure III-C-2 and Table III-C-1). They include a division-sized infantry unit at Ping-liang, a division-sized artillery unit at Yung-teng, a division-sized armored unit at Chiu-chuan, a division-sized cavalry unit at Lin-hsia, and division-sized AAA units at Lan-chou (Ho-kou), and Yu-men. Two probable units, a division-sized infantry unit and a division-sized AAA unit, are in the Chang-yeh area. Table III-C-1 lists all major ground forces-associated targets within Kansu.
- 46. A probable, specially tailored, division-sized border defense unit is situated at or near the eight strategic defensive mounds. However, because the mounds contain varying amounts of ground forces weapons, and because the size of the units at each mound cannot be determined, the exact size and composition of the unit at Shuang-cheng-tzu remains unknown (Figure III-C-1).

47. There are at least 53 other ground forces-associated facilities in Kansu. However, the level and concentration of activity at these remaining installations precludes their identification as organized units (Figure III-C-3 and Table III-C-2).

Major Ground Forces Facilities

- 48. A division-sized infantry unit is at Ping-liang, 160 nm east of Lan-chou. Personnel appear to be housed in four installations: Ping-liang Army Barracks East AL 4, Ping-liang Army Barracks SSE AL 3, Ping-liang Army Barracks W AL 1, and Ping-liang Army Barracks NW AL 2. An artillery regiment possibly organic to the infantry division is at the latter. The installations have appeared active since first observed in early 1967.
- 49. Three regiment-sized areas (Yung-teng Army Bks SSE AL 1, Yung-teng Army Bks SSE AL 2, and Yung-teng Army Bks SSE AL 3), as well as the presence of large numbers of field artillery pieces, indicate the presence of a division-sized artillery unit at Yung-teng. Yung-teng is 60 nm north-northwest of Lan-chou along the Lan-chou/Wu-lu-mu-chi rail line. All of the installations have a large number of vehicle and equipment storage buildings.
- 50. The regimental installations at Yung-teng have remained active since first observed on photography in August 1964. Field artillery pieces have also been observed at Ping-cheng-pao Military Training Area, 15 nm northeast of Yung-teng. Ping-cheng-pao appears to be a training area used for field exercises by the units at Yung-teng.
- 51. A probable armored division is in three regiment-sized installations, Chiu-chuan Armor Inst SW, Chia-yu-kuan Armor Installation, Chin-fo-ssu Army Bks 1, and one central administration and repair facility, Chiu-chuan Army Bks S AL 1, in the Chiu-chuan area. Chiu-chuan is 200 nm south of the Mongolian border and 30 nm west of the rail line leading to Shuang-cheng-tzu Missile Test Center. Elements of the armored unit were first observed in the area at Chin-fo-ssu Army Barracks in June 1971. Two additional regimental areas were observed at Chia-yu-kuan Armor Installation and Chiu-chuan Military Installation Southwest in February 1972. The number of armored vehicles has increased steadily in the division area.
- 52. Three major regiment-sized barracks areas, Lin-hsia Army Bks SW AL 1, Lin-hsia Army Bks N AL 3, and Lin-hsia, HQ Cav Div A Army Bks AL 3, are in the Lin-hsia area, 50 nm southwest of Lan-chou. They provide sufficient facilities to accommodate a division-sized unit. The presence of horses, horse sheds, and hitching posts indicates the unit is probably cavalry. The observation of division-sized elements within the Lin-hsia area dates to 1963 and the area has remained active.
- 53. Enough light AAA pieces to equip a AAA division are deployed in 17 sites in the Ho-kou area, 17 nm west of Lan-chou. Deployment west and southwest from Ho-kou suggests the role of the unit is to provide defensive support for the Lan-chou Gaseous Diffusion Plant

 Main housing and support installations associated with the unit appear to be at Ho-kou Barracks Area South and Ho-kou military installations.
- 54. Elements of a division-sized AAA unit are in the Yu-men area, along the Lan-chou/Wu-lu-mu-chi rail line. The unit consists of three regimental areas forming an arc north

 No large regimental barracks areas are within the area. The accommodations for personnel within the unit area consist of on-site billeting and support facilities. The unit apparently deployed to its present location between mid-1971 and early 1972. No changes have occurred since the initial observation in February 1972.
- 55. Elements of two possible divisions, an infantry division and an AAA division, are contained at 12 installations in the Chang-yeh area, 270 nm northwest of Lan-chou. Enough equipment and facilities to accommodate both division-sized units are dispersed along a 50-nm-segment of the Lan-chou/Wu-lu-mu-chi rail line between Kao-tai and Chang-yeh. Barracks have been observed in the Chang-yeh area since June 1971; however, only scattered equipment sightings accompanied these identifications. The construction of additional barracks facilities was observed after mid-1971. This activity was paralleled by an increased number of equipment sightings, which reached a peak in November 1972. The area remains active and construction continues to date.

25X1

Special Defensive Areas

- 56. A unit of undetermined size and type is dispersed around and among eight special defensive mounds along the O-chi-na River Valley north of the Shuang-cheng-tzu Missile Test Center. The mounds are as near as 13 nm and as far as 135 nm from the China-Mongolian border.
- 57. Although the exact size and type of unit occupying each mound cannot be ascertained, indications are that a probable battalion-sized unit occupies each installation. Field artillery, as well as AAA, has been observed at all of the mounds except Shuang-cheng-tzu Special Defensive Mound 7. Other installations, perhaps belonging to the same unit, include two defensive weapons positions, Shuang-cheng-tzu Military Area and Shuang-cheng-tzu Weapons Positions. Field artillery pieces have been observed at both installations. The number and size of the installations, as well as the amount of equipment observed in the area, indicate the unit may be a division-sized border defense unit.

Other Ground Forces Facilities

58. The remaining ground forces-associated targets within the province vary greatly in physical size, pattern, and concentrations. In addition, although 12 of these have exhibited order-of-battle in the past, no large concentrations have been observed. These two limiting factors have precluded their identification with, or as, organized units.

Table III-C-1 Major Ground Forces Facilities, Kansu Province (Items keyed to Figure III-C-2)

tem	Installation Name/ BE/Coordinates	Size/Function	Ground or GFW OB/Latest Photography	Remarks/Latest Photography	
	Ping-liang Army Bks NW AL 2	Regt-sized instal	38 cargo trucks, 12 pieces of equip,	42 FA pieces,	2
	35-34-05N 106-37-45E	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			2
	Ping-liang Army Bks A Hq Inf Div AL 4	Regt-sized instal Infantry		OB never observed	2
	35-31-28N 106-43-12E				_
	Ping-liang Army Bks SSE AL 3	Regt-sized instal Infantry		OB never observed	2
	35-28-30N 106-51-25E				_
	Ping-liang Army Bks W AL 1	Hq/admin/instal Infantry		OB never observed	2
	35-32-55N 106-40-10E				_
5	Yung-teng Army Bks A Arty Div Hq AL 1	Regt-sized instal Artillery	6 FA, 26 cargo trucks, 3 pieces of equip,	7 FA pieces,	2
	00 40 2CN 102 16 20E				2
6	36-42-36N 103-16-29E Yung-teng Army Bks SSE AL 2	Regt-sized instal Artillery	6 cargo trucks,	16 FA pieces,	2
	36-40-52N 103-17-25E	,,			4
7	Yung-teng Army Bks SSE AL 3	Regt-sized instal Artillery	4 FA pieces, 14 cargo trucks,	8 FA pieces	2
	36-40-32N 103-17-32E				2
3	Ping-cheng-pao Mil Trng Area	No permanent facs Artillery	16 FA pieces, 35 cargo trucks 20 tents.		,
	37-01-00N 103-20-30E				2
9	Chiu-chuan Armor Instal SW	Regt-sized instal Armor	7 armored vehicles, 6 prob AA gun, 9 cargo trucks,	126 tanks, 5 poss armored vehicles*, 51 cargo trucks,]2
	39-38-53N 098-20-36E		Cargo trucks,		2
					_
10	Chiu-chuan Army Bks S AL 1	Div hqs & admin areas Armor	22 armored veh, 106 vehs,	26 tanks, 19 prob mod ZIL-57 (with machine gun mounts), 28 cargo trucks	2
	39-43-40N 098-30-40E			71 tanks, 13 APCs, 8 vans, 98	2
11	Chia-yu-kuan Army Bks A Armd Div Hq	Regt-sized instal Armor	51 tank, 31 armored veh, 2 poss armored veh, 6 AA gun, 7	cargo trucks*,	2
	39-50-08N 098-05-41E		cargo trucks,		2
12	Chin-fo-ssu Army Bks 1	Regt-sized instal Armor	80 armored veh, 60 cargo trucks,	80 tanks, 4 armored vehicles, 52 cargo trucks, 6 van trucks,	
	39-28-06N 098-43-16E				2
13	Lin-hsia Army Bks SW AL 1	Regt-sized instal Cavalry		OB never observed	,
	35-33-36N 103-07-57E				2

	tized Copy Approved for	IOP SECRET	RIIFF	25X 25X	
		Table III C 1 (Const			
	Installation Name/ BE/Coordinates	Table III-C-1. (Conti	Ground or GFW OB/Latest Photography	Comp. L. M	
	Lin-hsia Army Bks N AL 2	Regt-sized instal	OB/ Latest Photography	y Remarks/Latest Photography OB never observed	25
3	35-36-36N 103-12-20E	Cavalry			25
15 L	-in-hsia Army Bks	Poss batt-sized bks area Cavalry		OB never observed	2
	5-36-15N 103-10-21E	area Cavarry			۷,
	in-hsia Hq Cav Div A Army Sks AL 3	Regt-sized instal Cavalry		OB never observed	
3	5-35-10N 103-11-50E				2
7 н	lo-kou Bks Area S	Batt-sized bks area	70 AA guns,	70 AA gun, 37 cargo trucks,	21
3	6-03-00N 103-26-15E	AAA			25
8 н	o-kou Mil Instl	Batt-sized instal	76 AA gun,		3
	6-10-45N 103-26-10E				2
	u-men AAA Regt Mil Area ENE	On-site housing facs . No large permanent bks	62 AA gun		25
	0-19-00N 097-32-00E u-men AAA Regt Bks Area NE	AAA On-site housing facs;	49 00		۷.
	0-26-50N 097-21-00E	no large permanent bks AAA	48 AA gun		2
	u-men AAA Regt Mil Area N	On-site housing facs;	54 AA aun		
40	0-20-00N 097-02-00E	no large permanent bks AAA			2
2 Hu	ua-chai-tzu Mil Area	Scattered quarters	8 FA, 4 howitzer,	12 FA pieces, 14 AA guns,	~
38	-51-00N 100-24-00E	Infantry	8 mortar, 54 cargo trucks,	70 cargo trucks,	2
ß Ch	ang-yeh Army Bks N AL 7	Batt-sized bks area	No OB,	20	2
	-56-30N 100-26-30E	Infantry	NO OB,	29 cargo trucks,	2
	ang-yeh Army Bks NNE	Poss batt-sized		OB never observed	-
38-	57-00N 100-27-30E	bks area		ob nover observed	2
Ch	ang-yeh Army Bks AL 5	Poss admin bks area	No OB,	8 FA pieces, 8 AAA pieces,	
38-	55-31N 100-26-40E	Infantry			2
	ang-yeh Hq Inf Div and s AL 4	Batt-sized bks area Infantry		OB never observed.	
38-	56-00N 100-26-20E	·			2
Cha	ang-yeh Army Bks 2	Batt-sized bks area	21 cargo trucks,	6 FA pieces, 12 AA guns,	÷.
	57-10N 100-26-20E	Infantry		19 cargo trucks,	2
	ang-yeh Army Bks AL 3	Batt-sized bks area Infantry	No OB,	26 AA guns, 11 cargo trucks	25
	56-29N 100-27-08E -tse Army Bks AL 1	Rott sired blo	N. 05		۷.
	09-10N 100-10-45E	Batt-sized bks area Infantry	No OB,	9 FA pieces, 9 prob pieces, 6 AA guns, 30 cargo trucks,	2
Lin-	tse Hq Inf Div A Bks	Batt-sized bks area	27 AA gun, 2 fire		25
S A		Infantry	control radar, 9 TPP, 6 cargo		25
39-0	09-01N 100-11-00E		trucks,		25
Sha-	ching-tzu Army Bks AL 1	Batt-sized bks area	17 field gun, 12		
39-0	06-00N 100-16-10E	Infantry	howitzer, 4 mortar, 6 cargo trucks,		2
Kao	-tai Bks Area	Poss batt-sized bks area	No OB,	12 A A	25
39-2	2-40N 099-48-50E	Infantry		12 AA guns,	2
	n-chuan Bks Area	Batt-sized bks area	No OB,	9 poss TPP, 6 cargo trucks,	21
39-1	9-30N 099-43-20E	Infantry		, , , ,	2
Char	ng-yeh Army Bks AL 5	Poss admin/hq area Infantry		OB never observed	25
38-5	5-31N 100-26-40E	mand y			2,
					L.
		- 18 -			,
		- 10 -			_

				Sanitized Cop	by Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7
					IOF SECRET ROFF
		Table III-C-1. (Co	ntinuedl		
Item	Installation Name/ BE/Coordinates	Size/Function	Ground or GFW OB/Latest Photography	Remarks/Latest Photography	Ha-mit
35	Li-chia-tung-chuang Army Bks AL 1	5 batt-sized bks areas Infantry		OB never observed	
36	39-06-00N 100-21-00E Hslen-chuan-tzu Bks Area NW	Company size		OB never observed	K'u-shui
55	39-21-00N 099-41-30E	Company size		05 1010 050110	
37	Shuang-cheng-tzu Spec Def Mound 2	5 batt-sized bks areas Infantry	3 poss AA guns,	11 FA pieces, 4 AA guns, 1 prob tank*	
	41-53-TUN 100-33-27E	Border defense			Hsia-tung Shuang-ch'engt
38	Shuang-cheng-tzu Spec Daf Mound 6 42-07-03N 100-54-05E	5 batt-sized bks areas Infantry Border defense	6 FA pieces, 4 AA guns, 5 cargo trucks,	12 FA pieces, 4 AA guns,	Tilgabus An has Sala
39	Shuang-cheng-tzu Mil Area 42-13-31N 101-08-53E	Poss batt-sized bks area Border defense	18 FA pieces, 16 cargo trucks,	21 FA pieces, 1 prob FA piece,	Vii. man
40	Shuang-cheng-tzu Weepons Pos	Semipermanent facs Border defense	2 FA pieces,	5 FA pieces	Yü-men-shih (Lao-chün-miao)
41	42-03-18N 101-22-12E Tien-tsung-ta-wan Mtr Pool A Bks Area	Batt-sized bks Border defense	No OB,	6 122mm FA pieces	
42	41-01-10N 100-12-35E Shuang-cheng-tzu Spec Def	Batt-sized bks	2 FA pieces,	4 FA pieces,	
	Mound 8 40-25-46N 099-50-46E	Border defense			Ja-ch'attan S.4
43	Shuang-cheng-tzu Spec Def Mound 3 41-56-10N 101-01-40E	Batt-sized bks Border defense	6 FA pieces, 16 AA guns, 14 cargo trucks,	11 FA pieces, 9 AA guns,	14 ch'altan
44	Shuang-cheng-tzu Spec Def Mound 4*	Batt-sized bks Border defense	No OB,	6 FA pieces, 4 AA guns,	BASIN
45	41-43-23N 100-27-27E Shuang-cheng-tzu Spec Def	Bett-sized bks	1 tank, 6 FA pieces,	7 FA pieces, 6 prob FA	
45	Mound 5 41-45-57N 100-42-08E	Border defense	12 AA guns, 16 cargo trucks,	pieces.	Ko-erh-mu
46	Shuang-cheng-tzu Spec Def Mound 1	Batt-sized bks Border defense	3 FA pieces, 9 AA guns, 13 cargo trucks, 1 dummy tank,	6 FA pieces, 4 prob AA guns	SINGHAL
	42-19-51N 101-06-54E		1 000000		
47	Shuang-cheng-tzu Border Outpost 1 42-28-00N 101-07-30E	Border outpost Border defense		OB never observed	CT ₁
48	Shuang-cheng-tzu Defensive Stpt 41-16-00N 100-20-20E	Several quarters Border defense		OB never observed	
49	Shuang-cheng-tzu Bks Area AL 3	Hq & admin area Border defense		OB never observed	1068) ASHAN
50	41-07-10N 100-13-00E Lu-tseo-ching Mil Outpost	Mil outpost Border defense		OB never observed	ASHAN
51	42-26-06N 100-10-20E Shuang-cheng-tzu Def	No permanent housing		OB never observed	
	Strongpoint 42-22-48N 101-18-46E	facilities Border defense			DEFENSIVE MOUNDS
52	Shuang-cheng-tzu Spec Def Mound 7	Batt-sized bks Border defense		OB never observed	DEFEISIVE ROUNDS
53	41-32-3BN 100-24-02E Shuang-cheng-tzu Prob Bks Area 40-55-30N 100-08-40E	Batt-sized bks area Border defense		OB never observed	STATUYE MILES

40-55-30N 100-08-40E

25X1 Ha-mir Dalandzadgad 25X1 25X1 K'u-shui 37-53 25X1 25X1 Hsia-tung 25X1 25X1 25X1 25X1 25X1 Yü-men-shih (Lao-chün-miao) 2037 ORDOS DESERT Shih-tsui-shan NINGSIA 25X1 25X1 HUI A.R. 25X1 Yin-ch'uan 10 A M Ta-ch'al-tan 25X1 25X1 25X1 25X1 Chung-wei BASIN 25X1 Ta-t'ung-hsien 25X1 25X1 25X1 Yen-25X1 T'ien-shui 25X1 25X1 SHE 25X1 25X1 Kuang-yüan Items keyed to Table III-C-1 25X1

TOP SECRET RUFF

Sanitized Copy Approved for Release 2011/08/09 * CIA-RDP78T05162A000300010083-

25X1

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

25X1 25X1

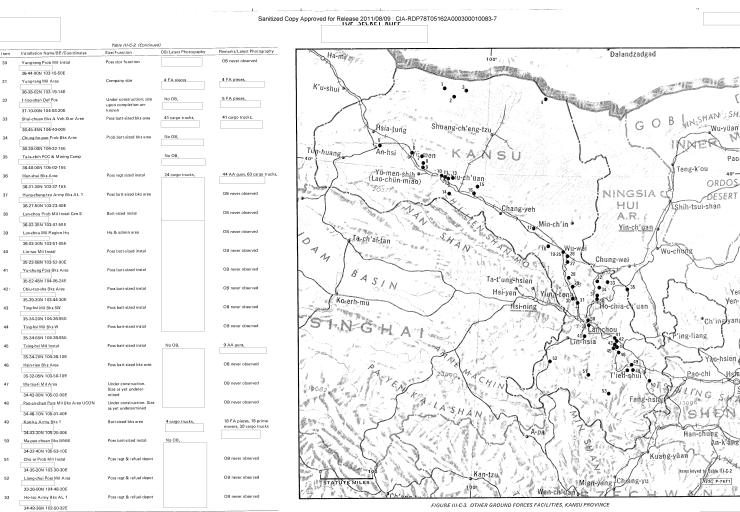
Table III-C-2. (Continued)
Size/Function OB/Latest Photography Installation Name/BE/C Remarks/Latest Photography Yu-men Bks Area NW Poss batt-sized bks area OB never observed 25X1 25X1 Chih-chin-hsia Bks Area NE Poss bett-sized bks area OB never observed 25X1 40-13-27N 097-27-53E 25X1 25X1 40-09-15N 097-15-00E Chiu-chuan Bks Area Batt-sized bks area OB never observed 25X1 39-45-10N 098-29-30E 6 AA guns, Chiu-chuan Prob Mil Instal 25X1 39-45-50N 098-31-10E Chiu-chuan Bks Area N Quarters for AAA battery 6 AA guns, 6 AA guns, 25X1 Chiu-chuan Mil Instal Quarters for AAA battery No OB, 20 AA guns, 51 cargo trucks 25X1 39-46-00N 098-36-30E 17 AA guns, 21 cargo trucks, 25X1 39-35-40N 098-46-10E Chin-ta Bks Area Poss batt-sized bks area OB never observed 25X1 Lin-shui Poss Bks Area Poss bett-sized bks area OB never observed 25X1 39-51-01N 098-48-56E 25X1 38-45-10N 101-03-10E Poss batt-sized bks area Yung-chang Prob Bks Area OB never observed 25X1 38-15-05N 102-01-30E 25X1 37-57-40N 102-33-15E Repair facility OB never observed 25X1 37-55-10N 102-3B-20E Wu-wei Prob Constr Engr Bn Prob batt-sized bks area OB never observed 25X1 37-56-20N 102-37-30E Prob batt-sized bks area 25X1 37-55-50N 102-37-20E Wu-wei Bks Area NE Prob batt-sized bks area OB never observed 25X1 25X1 37-56-20N 102-38-20E Wu-wei Bks E Prob batt-sized bks area 25X1 37-55-30N 102-38-50F 25X1 37-55-35N 102-37-35E Ching-pien-i Army Bks AL 1 Regt-sized bks area 25X1 37-40-44N 102-50-58E Chou-chia-chuang Poss Mil Area Poss mil outpost No OB 25X1 37-36-00N 102-49-32E Tien-chu Bks Area Poss batt-sized bks area 25X1 37-15-00N 102-51-30E Yung-teng Poss Bks Area 25X1₁ 36-52-50N 103-11-48E

Table III-C-2. Other Ground For ince (Items keyed to Figure III-C-3) Installation Name/BE/Coordinates OB/Latest Photography Remarks/Latest Photography Lu-tsao-kau Prob Border Outp 42-39-10N 096-48-02E Lu-tsao-kou Border Outpost Border outpost OB never observed 42-27-10N 097-08-15E 41-48-22N 097-00-59E Cha-han-te-su Rdr Outpost Border outpost 42-03-55N 102-33-35E An-hsi Bks Area Poss roadside depot 40-31-20N 095-45-20E Yu-men Army Bks East

40-12-55N 097-12-35E

- 20 -

TOP SECRET RIIFE



- 21 -TOP SECRET PILES

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

25X1 25X1 25X1

25X1 25X1 25X1

25X1 25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

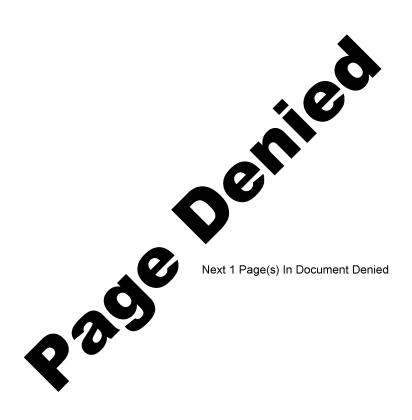
25X1

25X1

25X1 25X1

25X1

25X1



Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7 TOP SECRE I RUFF	25X1
	25 X 1
E. Electronics	
66. There are 63 electronics-related facilities in Kansu Province, most of which can be placed into the following four categories: space tracking, EW/AW radar, communications, and microwave radio relay facilities (Figure III-E-3 and Table III-E-1). The two main target concentrations are around Lan-chou and Shuang-cheng-tzu. Lan-chou is the largest metropolitan area in the province. Shuang-cheng-tzu is the location of the Shuang-cheng-tzu Missile Test Center.	
Space Tracking	
67. Lan-chou Space Tracking Facility, 20 miles east-southeast of Lan-chou, was first identified	25)
68. It contains two parabolic dish antennas and is connected to a regiment-sized barracks area by underground cable.	25)
Radar Facilities	
69. The 29 radar facilities within the province can be placed into three main categories. They support airfields, provide border surveillance along the corridor area, and support the facilities at the Shuang-cheng-tzu Missile Test Center (Figure III-E-2).	
Communications	
70. Twenty-two communications facilities are located within the province. They are basically in areas of strategic importance, near airfields, or around major population centers. Fifteen of the facilities are HF receiving and/or transmitting stations. The remaining nine consist of a variety of types including DF, MF, and TV broadcast stations.	
Radio Relay Stations	
71. The first radio relay stations in China were identified in Kansu in 1972,* (Figure III-E-1). Ten radio relay stations have been identified within the province. Nine of these extend on a line from west of Lan-chou in a southeasterly direction through Tien-shui toward Pao-shi, in Shensi Province.	
72. The tenth station, at Lung-te (item 59, Table III-E-1), is the only facility which does not appear to exhibit line-of-sight contact with any of the other nine sites. No electronics equipment has been observed at any of the stations, but all appear to be bunkered and externally complete.	
	25X1
	25X1
TOD CECOET DIFE	
TOP SECRET RUFF	25X1



τ	able III-E-1. Electronics-Related Facilities, Kansu	Province (Items keyed to Figure III-E-3)	
Item	Installation Name/BE/Coordinates	Electronics Equipment/Latest Photography	
SPACE TRA	CKING FACILITIES		
1	Lan-chou Space Trk Fac	parabolic dish antennas	25X1
	35-56-32N 104-10-32E		25 X 1
RADAR FA	CILITIES		
2	An-hsi AW Radar Fac	None,	25 X 1
-	40-32-30N 095-46-45E		25 X 1
3	Yu-men Afld AW Radar Fac	1 cut parabolic radar, 1 dual-purpose radar	
3			25 X 1
4	40-18-00N 097-02-00E Mo-wu AW Radar Fac	1 MOON CONE	25 X 1
4			25 X 1
5	40-49-00N 098-30-00E Hongor Dzag Poss AW Radar Fac	2 poss radar,	25 X 1
5			25X1
c	42-01-35N 098-20-10E Lu-tsao-kou AW Radar Fac	SPOON REST (Chinese variant) 5 horiz	
6		dipole,	25X1
7	42-21-45N 097-05-33E Shuang-cheng-tzu Afld AW Rdr Fac	3 KNIFE REST, 1 height finder	25X1
,			25 X 1
8	40-23-51N 099-47-23E Shuang-cheng-tzu AW Rdr Fac	None ever observed	
o .			25 X 1
9	40-57-//N 100-16-//E Ha-la-su-huai Radar Fac	1 FLAT FACE,	25 X 1
9			25 X 1
10	40-58-48N 104-19-10E Lu-tsao-ching AW Radar Fac North	1 MOON series,	
10			25 X 1
11	41-55-30N 099-54-45E Ho-ho-bulag AW Rdr Fac	1 MOON CONE, 2 KNIFE REST, 1	
11		SPOON REST, 2 dipole,	25X1
12	41-54-00N 101-03-00E Sha-tsao-chuan Radar Fac	1 MOON series, 1 SPOON REST,	20 A I 25 X I
12			25 X 1
12	41-24-00N 102-52-00E Ching-shui Afld AW Rdr Fac	2 CROSS LEGS	25 X 1
13			25X1
1.4	39-35-10N 098-53-50E A-la-shan-yu-chi AW Rdr Fac*	2 Suuji B, 1 Suuji D, 1 Yin-chuan A,	
14		1 poss radar	25X1
15	39-05-56N 101-52-09E Wan-chia-po AW Radar Fac	1 KNIFE REST	25 X 1
15			25 X 1
16	36-27-39N 103-37-39E Liu-tun-tzu AW Rdr Fac	1 CROSS LEGS, 1 height finder	
10			25X1
17	36-31-52N 103-40-46E Sha-liang-tung AW Rdr Fac	1 BAR LOCK, 1 SPOON REST, 1 height	
17	36-32-25N 103-41-00E	finder,	25 X 1
18	Ta-la-chih AW Rdr Fac	1 BAR LOCK, 1 ROCK CAKE/STONE	
.5	36-36-50N 104-56-50E	CAKE, 1 KNIFE REST	25X1
19	Ying-pan-shui Rdr Site	1 poss MOON series,	25 X 1
13		· · · · · · · · · · · · · · · · · · ·	25 X 1
20	37-32-13N 104-25-21E Cha-tzu-kou AW Radar Fac	1 CROSS LEGS, 1 ROCK CAKE/	
20		STONE CAKE	25 X 1
	38-07- 4 7N 102-43-02E		

25X1

25X1

Table III-E-1. (Continued)

	Table III-E-1. (Cont	rinued)	
Item	Installation Name/BE/Coordinates	Electronics Equipment/Latest Photography	
21	I-ha-pa-ho AW Rdr Fac	1 MOON.CONE	
	39-15-58N 102-01-57E		25 X 1
22	Lang-mu-ssu AW Radar Fac	2 poss radar	
	33-58-20N 102-06-40E		25 X 1
23	Wu-tu Radar Fac	1 CROSS LEGS,	
	33-28-50N 105-09-30E		25 X 1
24	Min-hsien AW Radar Fac	1 CROSS LEGS, 1 height finder,	
	34-41-00N 104-11-50E		25 X 1
25	Lin-tao AW Radar Fac	1 CROSS LEGS	25V1
	35-22-30N 103-59-10E		25 X 1
26	Yang-chai AW Radar Fac	1 BAR LOCK, 1 CROSS LEGS, 1 ODD LOT,	SEW1
	35-44-00N 103-59-05E	LOT,	25 X 1
27	Hua-chia-ling AW Radar Fac	1 CROSS LEGS, 1 height finder,	25 X 1
	35-22-30N 105-01-00E		
28	Hsi-feng-chen AW Radar Site	1 MOON series.	25X1 25X1
	35-44-19N 107-38-49E		25/1
29	Tien-shui-Prob AW Radar Fac	1 prob radar	25X1
	34-36-20N 105-38-50E		25 X 1
30	An-hsi AW Radar Fac	1 radar,	25X1
	40-32-30N 095-46-45E		25 X 1
COMMUNI	CATIONS FACILITIES		
31	_Chang-yeh Afld HF Commo Fac	1 CROSS LEGS, 1 stick mast	
	38-48-40N 160-41-40E	1 011000 EEGG, 1 stick mast	25X1
32	Ching-shui Electronics Fac	12 dipole, 2 vee,	
	39-35-17N 098-51-18E	- 12 dipolo, 2 voc,	25X1
33	Chiu-chuan Thick Eight Fac	Eight caged dipoles	
	39-46-00N 098-39-35E		25 X 1
34	Shuang-cheng-tzu MTC Rangehead XMTR	12 rhombic antennas, 10 horizontal	
	41-09-15N 100-18-11E	dipoles	25 X 1
35	Shuang-cheng-tzu Radcom XMTR	1 horizontal dipole in day-night pair	
	40-25-37N 099-46-12E	4 quadrant antennas	25X1
36	Shuang-cheng-tzu MTC Rangehead Receiver	3 day-night rhombics, 3 dipole antennas	
	40-55-06N 100-08-30E		. 25X1
37	Shuang-cheng-tzu Radcom Receiver	_4 horizontal dipoles,	1
	40-25-41N 099-44-16E		25 X 1
38	Tien-tsung-ta-wan HF Commo Fac	1 rhombic, 1 horizontal dipole,	
	40-57-45N 100-11-00E		25X1
39	Lan-chou TV Broadcast Station	1 TV tower,	25 X 1
	36-02-40N 103-48-40E		25X1
40	Lan-chou Radcom & AM XMTR No 1	Horizontal broadcast array	
	36-04-35N 103-50-49E		25X1
41	Lan-chou Radcom Sta No 1	1 rhombic, 2 day-night horizontal dipole,	,
	36-04-43N 103-51-06E	1 day-night rhombic, 2 vee, 8 horizontal dipole	25X1 25X1
42	Lan-chou Radcom Sta No 2	4 rhombic, 6 horizontal dipole, 2 vee,	r
	36-03-21N 103-53-58E		25X1

- 28 -

25X1

TOP SECRET RUFF

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7 Electronic Equipment/Latest Photography Ha-mi 100° Dalandzadgad 25X1 25X1 Lan-chou Radcom Sta No 3 36-02-43N 103-52-40E Ha-chia-tsui Radcom XMTR K'u-shui 36-28-15N 103-36-40E 0 36-29-30N 104-30-50E G O B VINSHAN SHÃ Wu-wei Radio Commo Fac Shuang-ch'eng-12 Hsia-tung Wu-yüai25X1 37-55-30N 102-39-10E Wu-wei HE Commo Fac 25X1 25X1 37-58-25N 102-32-58E Pac.J 25X1 Yü-men-shih •-(Lao-chün-miao) Teng-k'ou Chiu-ch'uan 40°-La-tzu-kou Prob Commo I ORDO\$25X1 2037/* 34-13-33N 103-52-35E Cuan-pao U/I ACT (Poss IN 34-59-30N 104-04-451 Chang-yeh Şhih-tsui-shan Min-ch'in • 35-40-15N 104-07-10E 10 × 4 SHAN Yin-ch'uan Ta-ch'ai-tan 2 rhombics, 1 dipole, 35-55-05N 104-10-50E RADIO RELAY STATIONS Chung-wei BASIN 25X1 25X1 Yu-pan-chen Radrel Sta/Bnl Ta-t'ung-hsien 34-56-05N 104-53-55E Tien-shui Radrel Sta/Bnk Hai-yen Yung-ten Ye25X1 34-31-30N 105-42-40E Hsi-ning SINGHAI 34-38-30N 105-54-15E Pai-ho-chen Radrel Sta/Bri 34-59-10N 105-19-30E ing-liang Man-ho-chen Radrel Sta/Bnk Ma-chia-chi Radrel Tmnl 35-43-55N 104-13-50E 19682 35-39-30N 106-13-00E Feng-hste Lan-chou Radrel Sta/Bnk 36-02-11N 103-59-10E Hsi-ku Radrel Sta/Bnk 36-09-30N 103-32-30E SPACE TRACKING
ADDAR
COMMUNICATION
RADIO RELAY FA 36-17-30N 103-47-30E Kuang-yüan OTHER RELATED TARGETS Z Kan-tzu Mien-yang Chiang-yu Wen-ch'uan

25X1

25X1

TOP SECRET RUFF

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

F. Industrial

- 73. There are 90 industry-related facilities in Kansu Province. One of these, Pai-yin Explosives Plant 805, is of major strategic importance. Eight facilities are considered of major importance. They are: Chiu-chuan Iron and Steel Plant, Lan-chou Petroleum Refinery, Lan-chou Aluminum Plant, Lan-chou Aluminum Plant Hsi-ku, Lan-chou Petrochemical Plant, Lan-chou Chemical Fertilizer Plant, Pai-yin Copper Smelter and Refinery Plant, and An-kou-yao Ammunition Plant.
- 74. The remaining 81 industry-related facilities can be classified into five main categories: chemical, mining, general fabrication and manufacturing, power, and general industry (Figure III-F-1 and Table III-F-1).

Strategic Industry

75. Pai-yin Explosive Plant 805, 32 nm north-northeast of Lan-chou, was first observed in June 1963. The plant area, containing five main production lines, produces four explosives: RDX, TNT, PETN, and tetryl. The RDX and PETN production lines at Pai-yin are reported to be the only ones known in China.

A large explosive storage area, collocated, probably stores the products of the plant (Figure III-G-2).

25X1

Major Industries

- 76. Chiu-chuan Iron & Steel Plant. The plant at Chiu-chuan, 10 nm southwest of Chiu-chuan, was first observed in March 1965. Construction of several small related industries has been observed since that time. It is the only large iron and steel plant in Kansu.
- 77. Lan-chou Petroleum Refinery. The Lan-chou Petroleum Refinery is 9.5 nm west/northwest of the center of Lan-chou. One of the largest refineries in China, this plant produces gasoline, kerosene, fuel oils, asphaltic materials, and coke.
- 78. <u>Lan-chou Aluminum Plant, Lan-chou Aluminum Plant Hsi-ku</u>. Both Lan-chou Aluminum Plants are in the western environs of Lan-chou. These are the only aluminum plants in Kansu Province.
- 79. Lan-chou Petrochemical Plant, Lan-chou Chemical Fertilizer Plant. The chemical plants at Lan-chou have been observed in operation since they were first seen on photography of September 1959. The plants produce a variety of products including nitrogenous fertilizers, ammonia, and nitric acid. The chemical fertilizer plant in this complex is one of the largest in China.
- 80. Pai-yin Copper Smelter and Refinery. Situated 35 nm north/northeast of Lan-chou, the complex has continued to increase in size. In addition, many associated collocated industries have been introduced. This industrial complex encompasses an area of nearly 10 square miles.
- 81. An-kou-yao Ammunition Plant. Part of the large manufacturing area at An-kou-yao, this facility is primarily engaged in the loading and testing of munitions. The area contains possible production facilities, loading facilities, and a direct-fire weapons test range. The installation was first observed on photography of July 1972.

Other Industries

82. Of the remaining industries within the province, eight are chemical related, 11 are mining related, 32 are general fabrication and manufacturing related, 15 are power related, 14 are general industry related, and one is research related.

T								
1 apie 111-F-1.	Industry-Related	Facilities	Kansu	Province	(Itame	kayad ta	Figure	(() E 1)

em	Installation Name/BE/Coordinates	Item	Installation Name/BE/Coordinates
RATE	GIC INDUSTRY	22	Ma harran Millian Control
		22	Wa-hu-ssu Mining Complex
	Pai-vin Explosives Plant 805	99	39-19-40N 097-56-25E
	36-30-52N 104-12-29E	23	Shih-tsui-shan Mining Cplx 2
AJOR I	NDUSTRY		39-36-10N 106-51-30E
	Chiu-chuan Iron & Steel Plant	24	Yung-chang Thermal Powerplant
			38-22-50N 102-05-35E
	39-48-55N 098-17-23E Lan-chou Petroleum Refinery	25	Ping-kou Ore Proc Plt
	,		38-45-00N 102-10-00E
	36-06-57N 103-38-23E	26	Ho-hsi-pao Ore Proc PIt
	Lan-chou Aluminum Plant		38-26-00N 102-01-55E
	36-10-20N 103-35-30E	27	Ho-hsi-pao Nitrogen Fert Plant
	Lan-chou Aluminum Plant Hsi-ku		38-22-00N 102-04-00E
	36-07-50N 103-35-52E	28	Wu-wei Thermal Powerplant
	Lan-chou Petrochemical Plant		37-55-10N 102-38-00E
	36-07-49N 103-36-34E	29	Wu-wei TPP Yang-chia-wa
	Lan-chou Chemical Fertilizer Plant		37-39-38N 102-51-18E
	36-07-21N 103-35-52E	30	Yung-teng Cement Plant
	Pai-yin Copper Smelter & Refinery Plant		
	36-33-10N 104-12-05E	31	36-49-50N 103-13-00E
	An-kou-yao Ammo Plant	0.	Wu-sheng-I IndrI Explosive PIt
	35-15-15N 104-46-10E	32	36-53-20N 103-10-30E
HERIN	IDUSTRY	02	Yuna-tena Nitro Ftlzr Plt
	Hung liv young Brok Minima A	33	36-49-15N 103-13-45E
	Hung-liu-vuan Prob Mining Acty	33	Yung-ten Ammo Plant
	41-05-35N 095-14-30E	24	36-47-49N 103-13-29E
	Yu-men Thermal Powerplant	34	Ching-yuan Ore Processing Industry
	40-12-34N 097-21-35E		36-44-00N 104-45-00E
	Tien-tsung-ta-wan Thermal Powerplant	35	Ching-yuan Nitro Ftlzr Plant
	40-59-10N 100-14-25E		36-40-00N 104-44-49E
	Chang-yeh TPP South	36	Ta-la-chih PCC & Mining Camp
	38-55-09N 100-26-40E		36-40-00N 105-02-15E
	Chang-yeh TPP North	37	Pai-vin Ore Conc Plant
	38-57-10N 100-25-40E		36-37-15N 104-15-44E
	Chia-yu-kuan Thermal Powerplant	38	Pai-yin Light MFG Plant
	39-49-10N 098-15-00E		36-35-00N 104-08-00E
	Shan-tan Thermal Powerplant	39	Lan-chou Equipment Plant
	38-46-28N 101-04-30E		36-06-46N 103-42-18E
	Shan-tan Coke Plant	40	Lan-chou Assv/Fab Plant
	38-46-00N 101-06-50E		36-06-00N 103-37-45E
	Yu-men Oil Fields	41	Lan-chou Medium Metals Fab Plt NR2
	39-46-50N 097-32-30E		36-05-33N 103-45-29E
	Chiu-chuan Prob Nitro Ftlzr Plt	42	Lan-chou Thermal Powerplant Hsi-ku
	39-44-50N 098-31-30E		36-07-49N 103-37-16E
	Chiu-chuan Veh Assembly/Repair Fac	43	Lan-chou Transformer Station
	39-44-50N 098-29-35E		36-02-40N 103-45-00E
	Lung-wang-miao Mining Complex	44	Lan-chou Iron Plant
			India in oil I laint

Dalandzadgad Ha-mir m Lin-hsia Nitro Ftlzr Plant 34-34-40N 105-58-00E 35-30-37N 103-05-44E Tien-shui Fabrication Ind SW K'u-shui 34-33-35N 105-40-50E 35-41-15N 104-16-20E U A-kan-chen Coal Mining C 34-34-20N 105-43-45E Yu-chung U/I Processing Industr Tien-shui Light Industry Hsia-tung Shuang-ch'eng-tzi 34-34-34N 105-43-30E 35-48-00N 104-04-00E Tien-shui Light Industry INNE 34-34-40N 104-45-05E 35-01-10N 104-36-30E Lung-hsi Nitro Ftlzr Plan 34-58-00N 104-39-00E 34-34-48N 105-46-50E Teng-k'ou chiu-ch'uan Lung-hsi Fabrication Plan ORDO25X1 34-34-30N 105-46-10E 34-58-00N 104-38-00E NINGSIA 20378 DESERT 25X1 13,14 Chang-yeh HUI 34-59-00N 104-39-30E 34-27-15N 105-43-10E Ma-pao-chuan U/I Ind Uco A.R. Lung-hsi Prob Industry UCO 16,17 Min-ch'in ● 34-34-20N 106-00-30E 34-59-00N 104-34-49E Yin-ch'uan Ta-ch'al-tan 10 A 4 Shu-chia-pa Ind Area 34-57-15N 104-43-00E 34-15-17N 105-54-29E Li-tzu-yuan Lt Fab Ind Chin-an Substation Chung-wei 34-48-40N 105-39-00E BASIN Chin-an Fabrication Com Chiang-kou-chuan Lt Ind Ta-t'ung-hsien 33-52-54N 106-11-56N 34-53-45N 105-39-30E Hai-yen Ko-erh-mu 34-49-10N 105-39-30E 33-25-00N 104-52-20E Yu-chung Prob Explosi-35-51-50N 104-00-35E 35-16-00N 106-48-00E An-kou-yao TPP 35-13-40N 106-47-30E 34-45-15N 105-06-00E 34-45-50N 105-19-30E 35-31-15N 106-37-15E-Ping-laing Prob Nitrogen Fert P Pan-an-chen Fertilizer Plan 35-30-40N 106-44-0DE 34-45-25N 105-01-50E Ping-liang Cement Plant TA-LASHAN 35-32-40N 106-37-40E 34-44-00N 104-53-40E Wu-shan Prob Mining Act Lien-hua-cheng Dam & HPP Liu-chia Hs 34-44-50N 104-49-00E 35-56-00N 103-20-30E Wu-shan Ind Ucon Feng-tai-pao Prob Dam Ucon 34-44-00N 104-51-45E 35-15-00N 103-26-00E Kan-ku Light Fabrication Industr 34.46.50N 105.19.10F 35-18-00N 102-30-00E Kuang-yūan Wo-to-li Fabrication Industr Ting-yuan-chen Const Ad 34-34-45N 105-41-15E 35-58-40N 103-58-26E Mien-yang Chiang-yu *Most of the facilities have been observed on recent photography; therefore no mission reference is in-cluded. 34-35-15N 105-44-00E

Wen-ch'uan

FIGURE III-F-1. INDUSTRY-RELATED FACILITIES, KANSU PROVINCE

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

TOP SECRET RUFF

34-34-24N 105-58-50E

25X1 25X1

G. Storage

- 83. There are 49 storage-related facilities in Kansu Province. They can be placed into three categories: POL storage, explosives storage, and general storage. Of the 27 POL-related storage facilities, only those at Yu-men, Lan-chou, Wu-wei, Yung-teng, and Shih-tung-ssu can be considered regional storage facilities. The remainder of the facilities serve local requirements (Figure III-G-3 and Table III-G-1).
- 84. Two of the four explosives-related facilities are of regional importance. Both the facilities at Shih-tung-ssu (Figure III-G-1) and Ma-chia-chi are extensive enough to be identified as regional explosives storage.

identifiable material can be directly associated.	

25X1 Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7 25X1 25X1 Table III-G-1. Storage-Related Facilities, Kansu Province (Items keyed to Figure III-G-3) Installation Name/BE/Coordinates Item Installation Name/BE/Coordinates Item POL 4 Yu-men Oil Fields 25X1 1 Hung-liu-yuan Pet Prod Stor 1 39-46-50N 097-32-30E 25X1-5 41-05-30N 095-28-50E Chiu-chuan Pet Prod Storage S 25X1, Hung-liu-yuan POL Stor 2 39-38-32N 098-27-29E 25X1 6 Ching-shiu POL Transfer Spur 41-06-22N 095-29-57E 25X1 3 Chang-yeh POL Storage 39-27-35N 098-40-05E 25X1 38-58-32N 100-30-38E Shan-tan POL Stor Area PUG 25X1⁻ 38-45-21N 101-01-56E

- 36 -

TOP SECRET DIVE

25**X**1

25X1

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

Table III-G-1. (Continued) Installation Name/BE/Co Shih-tung-ssu Prob Expl/St Wu-wei Pet Prds Stor PUG 36-20-20N 103-56-00E Wu-wei POL Storage 35-39-54N 104-15-48E 37-54-30N 102-36-50E Ma-chia-chi Ammo Mair 35-41-10N 104-13-30E 36-43-09N 103-16-39E Shih-tung-ssu POL Storage PUG GENERAL STORAGE 36-20-25N 103-55-50E Pai-vin POL Stor Area PUG Shuang-cheng-tzu Storage Ar 41-08-20N 100-15-59E 36-34-17N 104-09-12E Ma-chia-ping POL Storage Area 36-29-55N 103-25-25E 38-58-44N 100-30-12E Chang-yeh Storage Depo Lan-chou Pet Prod Stor 1 36-02-21N 103-54-56E Lan-chou Pet Prod Stor 4 Ta-chai-kou Warehouse Sto 37-02-25N 102-52-20E 36-01-48N 103-54-03E Lan-chou Petroleum Ref 36-06-57N 103-38-23E 36-57-20N 103-07-30E Yung-teng Storage Are 36-07-49N 103-36-34E Ching-yuan Storage Facility 36-33-30N 104-43-20E 36-01-10N 104-04-20E Lan-chou Pet Prod Stor 2 36-20-30N 103-55-50E 36-06-04N 103-39-58E Hsi-feng-chen POL Stor Area Shih-tung-ssu U/I Bunkere Storage Area 35-44-17N 107-38-45E 36-24-40N 103-50-00E Ting-hsi POL Stor N Ho-chia-chuan Tunnel Stor 35-36-00N 104-37-30E 36-25-52N 104-16-10E Ting-hsi POL Storage PUG 35-35-15N TU4-37-45E 36-36-10N 103-23-05E Ping-liang Pet Prod Stor Lu-liao-yai-liu Storage Area PUG 35-31-15N 106-42-50E 36-00-18N 104-03-50E Nan-pei-tao Pet Prod Stor Ting-hsi Storage Area 35-52-20N 104-32-20E She-shui-wang-chia Pet Prod Stor Ting-hsi Storage Area SW 35-15-25N 103-50-30E 35-33-30N 104-36-30E

34-56-17N 104-39-14E

34-58-12N 104-40-10E

35-55-00N 104-12-40E

36-41-55N 104-52-00E

EXPLOSIVES STORAGE

29 Ta-shui-tou Explo

Wen-feng-chen Pet Prds Stor PUG

Hsia-kuan-ying POL Stor Area

Ting-hsi Gen Storage W

35-35-15N 104-39-00E

Yu-chung Storage Area

35-51-10N 104-13-40E

34-58-00N 104-40-00E ese facilities have been observed on recent hy; therefore no mission reference is

Dalandzadgad Ha-mir 100° THE PERSON K'u-shui Shuang-ch'eng-tzi 1,2 Hsia-tung 40° hiu-ch'uan ORDOS NINGSIA DESERT HUI Shih-tsui-shan Chang-yeh A.R. Min-ch'in è Yin-ch'uan OAN Ta-ch'ai-tan Chung-wei BASIN Ta-t'ung-hsien Hai-yen ___ Ko-erh-mu Ven-'ing-liang T'ien-shui ASHAN SHE Kuang-yuan Items keyed to Table III-G-1 Mien-yang Chiang-yu

FIGURE III-G-3. STORAGE-RELATED FACILITIES, KANSU PROVINCE

- 37 -

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7 TUP SECRET RUFT

TOD CECDET DIVE

Sanitized Copy Approved for Release 2011/08/09 CIA-RDP78T05162400030001008

25X1

25X1 25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1

25X1 25X1

25X1

25X1 25X1

25X1

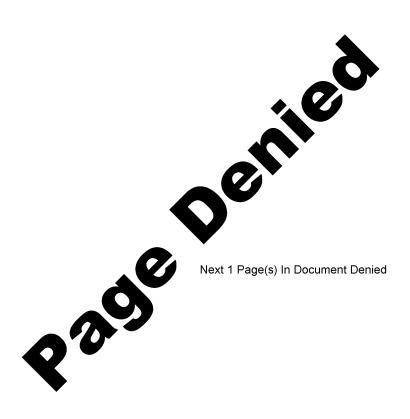
25X1

25X1

25X1

25X1

25X1



Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

TOP SECRET RUFF

25X1
25X1

I. Transportation

90. Lan-chou is the crossroad of road and rail networks leading from eastern China to the western provinces.

91. Two major rail lines enter Kansu from the east, one from Shensi Province and the other from Ningsia-hui Autonomous Region. The only rail line serving the western provinces of China, the Lan-chou/Wu-lu-mu-chi rail line, extends westward from Lan-chou, paralleling the Kansu corridor to Wu-lu-mu-chi in the Sinkiang Autonomous Region. Important trunk lines lead to Hsi-ning, in Tsinghai Province, in addition to Shuang-cheng-tzu and Ta-la-chi, in Kansu.

- 92. Major roads generally parallel the rail lines. Although somewhat limited by topography, other roadways radiate from Lan-chou into all neighboring provinces and regions.
- 93. Two major rivers are within Kansu, the Huang-ho, which originates in Tsinghai, and the Wei-ho, which originates in the mountains of southern Kansu. Shallows and rapids prohibit both from being used for major transportation purposes.
- 94. Nine facilities are directly associated with transportation in Kansu. They vary in size from large installations, such as Hung-liu-yuan Complex, a major break-of-bulk point on the Lan-chou/Wu-lu-mu-chi rail line, to those as small as Ching-shui POL transfer spur. The major transshipment break-of-bulk points in Kansu are at Hung-liu-yuan, Tung-huang, Lan-chou, and Tien-shui (Figure III-I-1 and Table III-I-1).

Table III-I-1. Transportation Facilities, Kansu Province (Items keyed to Figure III-I-1)

Item	Installation Name/BE/Coordinates
1	Hung-liu-yuan Complex
	41-05-00N 095-28-00E
2	Hung-liu-yuan Railroad Repair Facility
	41-05-50N 095-31-00E
3	Tung-huang MTR Transport Depot
	40-06-30N 094-35-50E
4	Yu-men-shih RR Sta Yards & Shops
	39-48-35N 097-55-49E
5	Ching-shui RR Yard
	39-21-19N 099-02-49E
6	Lung-wang-miao RR Transfer Yd
	39-45-45N 098-15-40E
7	Ching-shui POL Transfer Spur
	39-27-35N 098-40-50E
8	Lan-chou RR Yard West
	36-04-15N 103-44-51E
9	Tien-shui Transshipment & Storage Fac
	34-33-20N 105-58-40F

Ha-mi Dalandzadgad K'u-shui Shuang-ch'eng-tzu SHUANG-CHENG-TZU Teng-k'ou ORDOS NINGSIA DESERT HUI Shih-tsui-shan A.R Yin-ch'uan OAN Ta-ch'ai-tan Chung-wei BASIN 25X1 Ta-t'ung-hsien Hai-yen 25X1 Yen-Ho-chia 25X1 LAN-CHOU 25X1 25X1 25X1 25X1 KA LASHAN 25X1 25X1 Kuang-yūan Items keyed to Table III-I-1 25X1 1000

FIGURE III-I-1. TRANSPORTATION FACILITIES, KANSU PROVINCE

NPIC Project 120601NC

- 41 TOP SECRET RUFF

Sanitized Copy Approved for Release 2011/08/09 : CIA-RDP78T05162A000300010083-7

nitized Copy Approved	d for Release 2011/08/09 : CIA-RDP78T05162A000300010083-	-7
	TOT GEORET	25X
	·	

TOP SECRET